

# Pacific Water Demand Management Newsletter

## January 2010



Welcome to the first edition of the Pacific Water Demand Management Newsletter – a brief update every 2 months on demand management and water loss happenings and activities in the Pacific.

Your contributions are most welcome and appreciated – please feel free to share upcoming and past events, activities, highlights, or anything else you see of value to be shared.

Please disseminate widely to your networks.

### ➤ FROM THE NEWS

“Water saving PRESSURE VALVES are being installed across greater Sydney under a plan to save more than 30 million litres of water a day by 2012. The new technology regulates water pipe pressure to reduce the risk of leaks and breaks.” (Sydney Water – from AWA Water E-News, 12th October 2009)

To subscribe to AWA Water E-News – click on the link below:  
[http://www.awa.asn.au/AM/Template.cfm?Section=Current\\_Water\\_E\\_News](http://www.awa.asn.au/AM/Template.cfm?Section=Current_Water_E_News)



### ➤ Progress in country: Niue & Vanuatu

Niue has been pro-active in implementing various water demand management practices as part of an integrated approach – including bulk metering, community and school awareness-raising, active leak detection and pilot household metering. An outlet replacement project was developed and implemented to address leaking taps and outlets in households and community buildings (identified as significant contributors to overall water loss in Niue).

In Luganville, Vanuatu, pressure management is being used to reduce system leakage and burst frequency. Two pressure reducing valves (PRVs) will be installed to reduce system pressure to an average of 31 meters. It is expected that an average financial saving of between 17% and 35% can be gained through reduced electricity cost for pumping.

Click [here](#) to view the WDM programme poster presentation from the 38th SOPAC Annual Session held during October in Port Vila, Vanuatu which provides brief details on Niue and Vanuatu as case studies for reducing operating costs.



## ➤ HOT TOPIC: Benchmarking

Benchmarking using Key Performance Indicators (KPIs) is a way for utilities to improve asset management practices, improve delivery of safe drinking water to customers and ultimately leads to better returns for money spent. Some common KPIs include non-revenue water (NRW) and revenue recovery rate (as a percentage of income).

A great resource for utilities is the IBNET - International Benchmarking Network for Water & Sanitation Utilities). The IBNET Toolkit ([www.ibnet.org/en/texts.php?folder\\_id=117&mat\\_id=97&L=1&S=3&ss=4](http://www.ibnet.org/en/texts.php?folder_id=117&mat_id=97&L=1&S=3&ss=4)) contains information and worksheets which you can use or adapt to start your own benchmarking scheme.

## ➤ FIRST STEP TO REDUCING WATER LOSS

The first step in establishing a water loss reduction programme is carrying out a water balance of the system. A water balance is a vital first step as it allows utility and water supply managers to quantify leakage in the system, identify problem areas and then identify which actions need to be taken and where.

At a basic level, a water balance is water supplied minus water consumed. Total water can be measured with bulk meters (often at bores or reservoir outlets) and water consumed can be collected from customers meters or estimated. The IWA standard water balance (shown) is used worldwide and acknowledged by many as being “best practice”. For further information see:

[www.pacificwater.org/pages.cfm/water-services/water-demand-management/resources-utilities.html](http://www.pacificwater.org/pages.cfm/water-services/water-demand-management/resources-utilities.html)

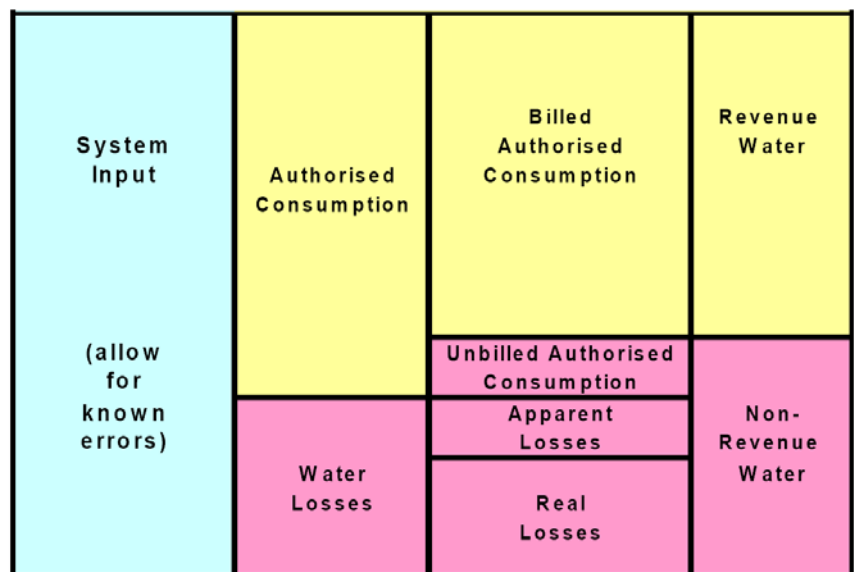


Figure 1. IWA simplified Best Practice Water Balance

## ➤ DISASTER PREPAREDNESS FOR UTILITIES

It is always prudent to be prepared for disastrous events such as tsunamis, earthquakes, floods, droughts and cyclones, and recent events in the Pacific have demonstrated the vital need for disaster preparedness. For utilities this is paramount because after any disaster the most essential need is clean safe water and adequate sanitation systems.

Guidelines have been developed to assist Pacific utilities to develop appropriate emergency preparedness and contingency plans to effectively deal with the impacts of natural and man-made disasters on water and wastewater facilities. The guidelines can be found here: [www.pacificwater.org/pages.cfm/water-services/water-demand-management/resources-utilities.html](http://www.pacificwater.org/pages.cfm/water-services/water-demand-management/resources-utilities.html).

For further information or to contribute to the next newsletter, please contact:

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The logo for SOPAC, featuring the word "SOPAC" in a bold, blue, italicized sans-serif font.The logo for nzaid, featuring a red stylized wave above the word "nzaid" in a bold, black, sans-serif font.

"The world's population has increased four-fold over the last hundred years, but we don't have a single drop of new water." (S. Maxwell, State of the Water Industry 2009)